

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/653,783	09/03/2003	Brian W. Brandner	2681.3153.001(567AW)	1511
23399	7590	06/08/2006	EXAMINER	
REISING, ETHINGTON, BARNES, KISSELLE, P.C.			DAVIS, ROBERT B	
P O BOX 4390			ART UNIT	
TROY, MI 48099-4390			PAPER NUMBER	
			1722	

DATE MAILED: 06/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

✓

**Supplemental  
Notice of Allowability**

Application No.

10/653,783

Examiner

Robert B. Davis

Applicant(s)

BRANDNER ET AL.

Art Unit

1722

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the IDS submitted April 7, 2006.
2. ☒ The allowed claim(s) is/are 2-5,9,11-14,17,24 and 25.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 04/07/2006
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 20060605.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Matthew Schmidt on June 5, 2006.

The application has been amended as follows:

Claims 1, 6-8, 10, 15, 16 and 18-23 have been canceled.

The remaining claims have been amended as shown in the *ATTACHED* listing of claims.

2. The following is an examiner's statement of reasons for allowance: The Japanese reference 60-49919 discloses a blow pin (11), a mold (8) and pinch plates (19) having actuating members (figure 3c). The reference fails to disclose or suggest a blow pin guide movable relative to the mold, the blow pin is diamond shaped in cross section, the pinch plate assembly includes at least one trim blade adapted to engage flash outboard of the seam created by a pinch plate assembly.

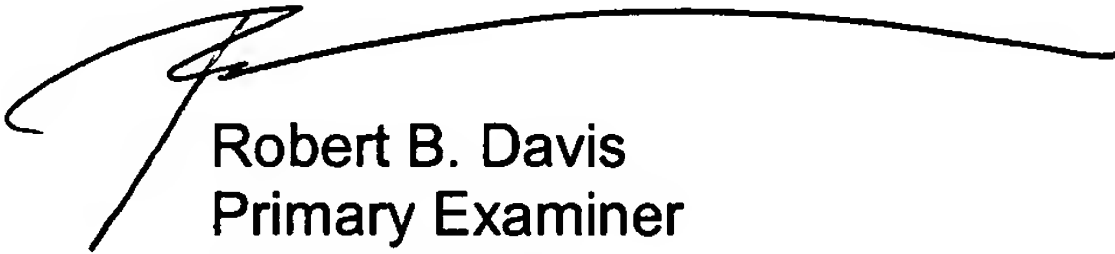
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 1722

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert B. Davis whose telephone number is 571-272-1129. The examiner can normally be reached on Monday-Friday 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on 571-272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Robert B. Davis  
Primary Examiner  
Art Unit 1722

6/6/2006

Art Unit: 1722

Claim listing:

1. (Canceled).

2. (Previously Presented) An apparatus for blow molding a fuel tank, comprising:

a mold defining a mold cavity and having an opening communicating with the mold cavity;

a blow pin through which a pressurized gas may flow, the blow pin being movable between an extended position received at least in part in the opening in the mold and communicating with the mold cavity and a retracted position removed from the mold cavity;

a blow pin assembly associated with the mold and including the blow pin, a blow pin guide movable relative to the mold between first and second positions and having a passage in which the blow pin is received for reciprocation between its extended and retracted positions, and at least one actuator which moves the blow pin guide; and

a pinch plate assembly movable between an open position spaced from the opening of the mold and a closed position adapted to engage fuel tank material in the area of the opening and close the material on itself forming a seam, whereby an opening in a blow molded fuel tank, created by the blow pin during the blow molding process, is closed.

3. (Original) The apparatus of claim 2 which also comprises an arm driven for linear reciprocation by the actuator to move the blow pin guide between its first and second positions.

Art Unit: 1722

4. (Original) The apparatus of claim 3 which also comprises a block carried by the arm and wherein the blow pin guide has a ramp surface along which the block travels as the arm is reciprocated so that as the block is moved with the arm in at least one direction it provides a force acting on the ramp surface to move the blow pin guide.

5. (Previously presented) The apparatus of claim 3 wherein when the arm is moved so that the block travels upwardly on the ramp surface a force is provided acting on the blow pin guide to move it downwardly.

6-8. (Canceled).

9. (Previously Presented) An apparatus for blow molding a fuel tank, comprising:

a mold defining a mold cavity and having an opening communicating with the mold cavity;

a blow pin through which a pressurized gas may flow, the blow pin being movable between an extended position received at least in part in the opening in the mold and communicating with the mold cavity and a retracted position removed from the mold cavity; and

a pinch plate assembly movable between an open position spaced from the opening of the mold and a closed position adapted to engage fuel tank material in the area of the opening and close the material on itself forming a seam, whereby an opening in a blow molded fuel tank, created by the blow pin during the blow molding process, is closed, and

wherein the blow pin is diamond shaped in cross section.

10. (Canceled).

Art Unit: 1722

11. (Previously Presented) The apparatus of claim 2 wherein the blow pin guide has a neck disposed at least in part between the pinch plates when the blow pin guide is in its first position to prevent the pinch plates from moving to their closed position when the blow pin guide is in its first position.

12. (Currently Amended) An apparatus for blow molding a fuel tank, comprising:

a mold defining a mold cavity and having an opening communicating with the mold cavity;

a blow pin through which a pressurized gas may flow, the blow pin being movable between an extended position received at least in part in the mold cavity and communicating with the mold cavity and a retracted position removed from the mold cavity; and

a pinch plate assembly movable between an open position spaced from the opening of the mold and a closed position adapted to engage fuel tank material in the area of the opening and close the material on itself forming a seam, whereby an opening in a blow molded fuel tank, created by the blow pin during the blow molding process, is closed, and a portion of the blow pin when in its extended position is disposed in the path of movement of the pinch plate assembly and when in its retracted position, is out of the path of movement of the pinch plate assembly;

~~The apparatus of claim 1~~ wherein the pinch plate assembly includes at least one trim blade adapted to engage flash outboard of the seam created by the pinch plate assembly.

13. (Currently Amended) An apparatus for blow molding a fuel tank, comprising:

Art Unit: 1722

\_\_\_\_\_ a mold defining a mold cavity and having an opening communicating with the mold cavity;

\_\_\_\_\_ a blow pin through which a pressurized gas may flow, the blow pin being movable between an extended position received at least in part in the mold cavity and communicating with the mold cavity and a retracted position removed from the mold cavity; and

\_\_\_\_\_ a pinch plate assembly movable between an open position spaced from the opening of the mold and a closed position adapted to engage fuel tank material in the area of the opening and close the material on itself forming a seam, whereby an opening in a blow molded fuel tank, created by the blow pin during the blow molding process, is closed, and a portion of the blow pin when in its extended position is disposed in the path of movement of the pinch plate assembly and when in its retracted position, is out of the path of movement of the pinch plate assembly;

\_\_\_\_\_ wherein the pinch plate assembly includes a pair of pinch plates having generally opposed leading faces and being movable from an open position with the leading faces spaced from each other to a closed position wherein the leading faces are closer together than in the open position so that the leading faces engage and seam fuel tank material as the pinch plates are moved toward the closed position;

~~The apparatus of claim 6~~ wherein the pinch plate assembly includes at least one trim blade carried by a pinch plate to engage flash outboard of the seam created by the pinch plate assembly.

14. (Previously Presented) An apparatus for blow molding a fuel tank, comprising:



Art Unit: 1722

a mold defining a mold cavity and having an opening communicating with the mold cavity;

a blow pin through which a pressurized gas may flow, the blow pin being movable between an extended position received at least in part in the opening in the mold and communicating with the mold cavity and a retracted position removed from the mold cavity;

a pinch plate assembly movable between an open position spaced from the opening of the mold and a closed position adapted to engage fuel tank material in the area of the opening and close the material on itself forming a seam, whereby an opening in a blow molded fuel tank, created by the blow pin during the blow molding process, is closed; and

a carrier arm received at least in part in the blow pin and being movable between an extended position received at least in part in the mold cavity and a retracted position removed from the mold cavity.

15. (Canceled).

16. (Canceled).

17. (Currently Amended) An apparatus for blow molding a fuel tank, comprising:

a mold defining a mold cavity and having an opening communicating with the mold cavity;

a blow pin through which a pressurized gas may flow, the blow pin being movable between an extended position received at least in part in the mold cavity and

Art Unit: 1722

communicating with the mold cavity and a retracted position removed from the mold cavity; and

a pinch plate assembly movable between an open position spaced from the opening of the mold and a closed position adapted to engage fuel tank material in the area of the opening and close the material on itself forming a seam, whereby an opening in a blow molded fuel tank, created by the blow pin during the blow molding process, is closed, and a portion of the blow pin when in its extended position is disposed in the path of movement of the pinch plate assembly and when in its retracted position, is out of the path of movement of the pinch plate assembly;

wherein the pinch plate assembly includes a pair of pinch plates having generally opposed leading faces and being movable from an open position with the leading faces spaced from each other to a closed position wherein the leading faces are closer together than in the open position so that the leading faces engage and seam fuel tank material as the pinch plates are moved toward the closed position;

~~The apparatus of claim 6~~ wherein the pinch plate assembly includes a guide plate spaced from the mold and adapted to guide the movement of and support the pinch plates.

18-23. (Canceled).

24. (Previously Presented) The apparatus of claim 14 wherein the carrier arm is adapted to releasably carry a component so that the component may be inserted into the fuel tank prior to closing the opening in the fuel tank.

Art Unit: 1722

25. (Previously Presented) The apparatus of claim 9 wherein a diagonal of the diamond shaped blow pin is parallel with the mold parting line.